Practical Clinical Biochemistry, 2nd ed. By H. Varley. (Pp. viii+635; 78 figures. 42s.) London: Heinemann. 1958.

The second edition of this work remains an excellent collection of methods. Some of the new methods included are very useful: this is particularly so for such tests as the qualitative test for increased total 5-hydroxyindole excretion. The new chapter on hormones is good. Although the choice of the particular method may still be a problem (an *embarras de richesses*) this edition is a little more helpful than the earlier one. A valuable addition is a section on the control of accuracy. It is to be regretted that not only has the opportunity been neglected to eliminate errors in the spelling of names which occurred in the first edition (Wootton on p. 413 and Dyke on p. 600 are both misspelt in both editions), but names occurring for the first time in this edition are misspelt (e.g., McMillan on p. 530). A third edition may confidently be expected; it is to be hoped that the author will take the opportunity to eliminate some of the methods, such as the open-circuit method of determining the basal metabolic rate and some of the seven blood sugar methods; methods retained could well be expanded to include a good deal more discussion of the difficulties that laboratories encounter when using them. In the present spate of books describing methods in clinical biochemistry, "Varley" is one of the few worth having. That the price has remained unchanged from one edition to the next is noteworthy.

ARTHUR JORDAN.

Clinical Chemistry in Practical Medicine, 5th ed. By C. P. Stewart and D. M. Dunlop. (Pp. vii+342; 30 figures. 27s. 6d.) Edinburgh and London: E. and S. Livingstone. 1958.

This book has now reached its 28th year and fifth edition, which in itself signifies its usefulness to generations of students and graduates. It has been revised and partly rewritten, and is now up-to-date enough to include a section on the transaminases though as yet no mention of haptoglobins. It covers all the needs of students and of most clinicians.

The average standard is high but rather uneven. The chapters on plasma proteins, carbohydrate metabolism, gastric function, and thyroid function impress one as particularly valuable. The chapter on acidosis and alkalosis, however, is likely to confuse many medical readers; the authors use the nomenclature by which the term "base" is defined as a substance which tends to accept hydrogen ions, and therefore includes anions such as HPO_4 and HCO_3 (which are often called "acid radicals") and excludes cations such as Na and K (which are included in the physiologist's expressions "base conservation" and "fixed base"). As the term "base" is so firmly entrenched in medicine in its old sense, it would be preferable to interpret acid-base balance in terms of acid and alkali, and anion and cation.

There are a few mistakes, such as the definition of congenital porphyria as a variety of porphyria cutanea

tarda which does not appear until adult life; and some of the interpretations will not be generally accepted, e.g., that for serum amylase "a figure for over 300 Somogyi units is clearly indicative of acute pancreatitis." Nevertheless this book, well set out, easy to read, and moderately priced, remains in general a very useful interpretation of chemical pathology to the clinician.

G. KEMP MCGOWAN.

Principles of Biological Microtechnique. By J. R. Baker. (Pp. 368; 8 half-tone plates, 14 text figures. 45s.) London: Methuen. 1958.

Essentially this book is an elaboration of the author's views recorded in former years in succeeding editions of *Cytological Technique*. The two main sections of the book deal with fixation and dyeing respectively. In the first the author considers the effects of a wide variety of fixatives on various tissue components, and in the second he considers the structure of dyes and the whole mechanism of staining. Succeeding chapters deal with metachromasy, blood dyes, and vital staining.

The book is not to be regarded as a handbook but as a critical and stimulating review. Histologically and histochemically it is strongly orientated towards zoological techniques, and the pathologist may find his favourite methods are wholly ignored. Nevertheless, he will do well to read it.

A. G. EVERSON PEARSE.

Absorption Spectrophotometry. By G. F. Lothian. (Pp. viii+246; 68 figures. 52s.) London: Hilger and Watts. 1958.

It is nearly 10 years since the first edition of this book was published and this second edition has been almost completely rewritten. As before, the book is divided into three parts: the first on principles of spectrophotometric measurement; the second, the application of these measurements for chemical and analytical purposes; the third, an up-to-date section which deals with the general design of spectrophotometers of various types. This section is illustrated by a great number of references, plans, and pictures of available commercial instruments both British and foreign.

It will be readily seen that a very large field is covered by Mr. Lothian and he necessarily does not go very deeply into detail. Nevertheless one has the impression of a very even treatment of this extensive field, and this book can be recommended with confidence to any person who requires a knowledge of spectrophotometry as an analytical tool. There is, however, one reservation; during recent years there has been an enormous increase in the use of spectrophotometry by scientists in many fields. The specificity and sensitivity of the methods, together with the success of instrument makers in producing robust instruments at a relatively low cost, has brought spectrophotometry into many laboratories which are

not staffed by people with an advanced formal physical education. As a result there is a growing body of people who use sensitive spectrophotometers without any clear understanding of the physics of their measurements, and I am not convinced that the presentation here is ideally suited for such people. Moreover, there is a flavour of the physicist about the derivations of the various equations. For example, the chapter on "laws of absorption" opens with a statement of Lambert's law in the form of a simple differential equation, which is integrated to give the familiar relationship between incident and transmitted light intensity. This is an elegant and economical treatment but is not, to my mind, the right approach for teaching the subject to (say) a zoologist using spectrophotometry for a biochemical estimation. Nevertheless, providing the reader is not frightened by the notation of elementary calculus, this book is readable and can be recommended.

I. D. P. WOOTTON.

The Determination of the ABO and Rh(D) Blood Groups for Transfusion. Medical Research Council Memorandum No. 36. (Pp. vi+46; 7 tables, 1 figure. 3s. 6d.) London: H.M.S.O. 1958.

As the authors state in their preface, blood transfusion has achieved such a prominent place in modern medicine that the present memorandum is, of necessity, much more than a revision of War Memorandum No. 9, 1943.

The working party set up by the Medical Research Council, consisting as it does of practical blood group serologists in daily touch with the complexities and dangers of grouping and cross-matching, concentrates on those techniques which have stood the test of time and stresses the need for these important investigations to be carried out only by those with special training.

It rightly emphasizes that in no other sphere of pathological investigation is an error fraught with such danger to the patient.

The whole memorandum is admirably set out, and, in particular, section VII, dealing with direct matching tests, is strongly recommended for study by all undertaking blood transfusion work.

The rapid direct matching test for use in emergency will be found particularly valuable in the laboratories of those hospitals dealing with accident cases.

R. A. ZEITLIN.

The Cytology of Effusions in the Pleural, Pericardial and Peritoneal Cavities. By A. I. Spriggs. (Pp. 71; 40 figures, 5 colour plates. 42s.) London: Heinemann. 1957.

Textbooks of cytology with their photographs and coloured plates often have a considerable aesthetic appeal. That written by Dr. Spriggs is no exception. Added virtues are a critical yet lucid text, plenty of

references, and the advocacy of Romanowsky stains. As an adjunct to standard textbooks and atlases of haematology this book can be recommended; but one may, perhaps, jib slightly at the price.

HUMPHREY KAY.

Coroner's Practice. By Gavin Thurston. (Pp. 180. 21s.) London: Butterworth. 1958.

In this short and handy publication the functions and duties of a coroner are clearly outlined. Its aim is to provide useful information for those beginning a career as coroner, and Dr. Thurston is to be congratulated on the balance of legal and medical information provided. This, together with the clarity of style, makes it particularly valuable for senior and junior persons who lack either legal or medical qualifications.

The chapter on accidental death is timely in view of the number of fatal accidents on the road or in industry, and the section on industrial diseases most useful. Some basic pathology is adequately dealt with under post-mortem examination, though it is hoped that in future editions of the work a little more space will be devoted to the pathological effects of coronary thrombosis. In many instances a present coronary thrombosis is accompanied by scarring, indicative of previous similar thromboses.

Dr. Thurston's work is certain to be well received and will be a valuable asset to those engaged in forensic work, and comes appropriately at a time when forensic pathology is being recognized as an important specialized branch of the parent subject.

G. J. CUNNINGHAM.

Corrections

In the paper by I. G. Graber and S. Sevit (J. clin. Path., 12, 25) there are two errors. (1) On page 27, the footnote to Table II, after fraction of filtered sodium excreted, read "A=normal or decreased from admission. B=early increase with fall to normal or decreased values. *Anuria after 24 hours." (2) In the legend to Fig. 8, for "on the right" read "on the left" and for "on the left" read "on the right."

In the paper by E. J. King and K. A. Jegatheesan (J. clin. Path., 12, 85), under the heading "Reagents," the second paragraph should read as follows:

Substrate (0.01 M-Disodium Phenyl Phosphate).—For the substrate, dissolve 2.18 g. disodium phenyl phosphate in 1 litre of freshly boiled and cooled distilled water and preserve with a few drops of chloroform in the refrigerator.